

Application No. 09/524,310  
Filed: March 14, 2000  
TC Art Unit: 3627  
Confirmation No.: 8521

AMENDMENTS TO THE CLAIMS

1. (currently amended) A method of automatically calculating an employee's compensation, comprising, in a processor:

associating sets of attributes with pay categories;

associating a compensation qualifier with each pay category;

collecting information corresponding to identified transactions; the identified transactions including punch information;

forming one or more completed shifts, responsive to the identified transactions and the employee's schedule, each of the completed shifts corresponding to at least one scheduled period of work;

splitting the employee's shifts into a plurality of sub-shifts, responsive to work parameters, each of the plurality of sub-shifts corresponding to at least one scheduled sub-period of work,

wherein the punch information includes information relating to actual times when at least one of the completed shifts begins and finishes, actual times when each sub-shift within the at least one completed shift begins and finishes, and actual times when the employee changes work assignments during the at least one completed shift, each work assignment corresponding to at least

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one respective sub-shift within the at least one completed shift;  
and  
for each sub-shift,  
determining a set of attributes for the sub-shift,  
determining a pay category with which the set of attributes  
is associated,  
assigning the pay category to the sub-shift, and  
determining compensation for the employee for the sub-shift,  
responsive to the assigned pay category, the employee's base pay  
and a compensation qualifier associated with the pay category,  
thereby allowing compensation to be determined for the  
employee who begins and finishes work at different times during  
the at least one completed shift, and who has different work  
assignments during different sub-shifts within the at least one  
completed shift.

2. (original) The method of Claim 1, wherein each set of  
attributes is a unique combination of attributes.

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3. (original) The method of Claim 1 wherein work parameters comprise at least one of workplace rules, scheduled time, holiday calendars, dates and times of the shift.

4. (original) The method of Claim 1 wherein a subshift comprises one or more contiguous intervals having common attributes.

5. (original) The method of Claim 1, wherein:

associating sets of attributes to pay categories comprises creating a mapping which maps each set of attributes to at least one pay category; and

determining the at least one pay category with which the set of attributes is associated is responsive to the mapping.

6. (original) The method of Claim 5 wherein the mapping is configurable by a user.

7. (original) The method of Claim 1, further comprising:

determining a total compensation for an employee for a pay period by adding the amounts determined for each subshift of the pay period.

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8. (canceled)

9. (previously presented) The method of claim 1, wherein plural compensation qualifiers are associated with a pay category, each compensation qualifier being in effect for a different time of day.

10. (previously presented) The method of claim 1, wherein the compensation qualifier comprises a pay multiplier, such that determining compensation for the employee for the sub-shift comprises multiplying the employee's base pay by the pay multiplier.

11. (previously presented) The method of claim 1, wherein the compensation qualifier comprises a pay adder, such that determining compensation for the employee for the sub-shift comprises adding the pay adder to the employee's base pay.

12. (original) The method of Claim 11, wherein the compensation qualifier additionally comprises a pay multiplier, such that determining compensation for the employee for the sub-shift

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comprising multiplying the employee's base pay by the pay multiplier.

13. (previously presented) The method of claim 1, wherein the compensation qualifier comprises a bonus time, such that determining compensation for the employee for the sub-shift comprises awarding the employee the bonus time.

14. (original) The method of Claim 13, wherein the bonus is added only if a specified minimum time requirement is met.

15. (original) The method of Claim 13, wherein the bonus time is specified amount of bonus time.

16. (original) The method of Claim 13, wherein the bonus time is specified percentage of time worked during a specified interval.

17. (original) The method of Claim 1, further comprising:  
setting a threshold for a first pay category;  
defining an overflow pay category; and  
calculating, for a given period, a total time awarded to the  
first pay category; and

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if the total time awarded to the first pay category exceeds the threshold, transferring the excess awarded time to the overflow pay category.

18. (original) The method of Claim 17, further comprising:  
the period is one day.

19. (original) The method of Claim 17, further comprising:  
the period is one week.

20. (original) The method of Claim 1, wherein an employee's actual compensation is calculated based on actual attendance and applicable compensation rules.

21. (previously presented) The method of Claim 20, wherein the actual attendance is determined from the collected punch information.

22. (previously presented) The method of Claim 21, wherein the punch information is collected by a reader through which encoded cards are swiped.

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23. (previously presented) The method of Claim 21, wherein the punch information is collected by a biometrics device.

24. (previously presented) The method of Claim 21, wherein the punch information is stored in a database.

25. (previously presented) The method of Claim 21, wherein the punch information comprises any or all of IN/OUT information, timestamps, and break indications.

26. (original) The method of Claim 1, wherein an employee's budgeted compensation is calculated based on the employee's assignment schedule.

27. (original) The method of Claim 1, wherein an employee's forecasted compensation is calculated based on the employee's actual attendance for a selected period, and the employee's assignment schedule.

28. (original) The method of Claim 1, wherein determining compensation for the employee for the sub-shift is responsive to a pay policy.

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29. (canceled)

30. (previously presented) The method of Claim 1, wherein the punch information comprises in punches and out punches.

31. (original) The method of Claim 1, wherein each sub-shift is classified as to which attributes are in effect.

32. (original) The method of Claim 31, wherein attributes comprise any or all of premiums, special pay, overtime, schedule deviation, holidays, and specially designated days.

33. (previously presented) A method of automatically calculating an employee's compensation for a pay period, comprising, in a data processor:

associating sets of parameters with pay categories, a compensation qualifier being associated with each pay category;

collecting information corresponding to identified transactions, the identified transactions including punch information;

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determining one or more time segments responsive to the identified transactions and the employee's schedule,

wherein the punch information includes information relating to actual times when each time segment within the pay period begins and finishes, and actual times when the employee changes work assignments during the pay period, each work assignment corresponding to at least one respective time segment within the pay period;

for each time segment,

determining a set of valid parameters according to a set of rules,

determining a pay category associated with the set of valid parameters, and

calculating the employee's compensation for the time segment responsive to the pay category, the employee's base pay and a compensation qualifier associated with the pay category; and

determining the employee's compensation for the pay period responsive to the calculated compensations determined for time segments within the pay period,

thereby allowing compensation to be determined for the employee who begins and finishes work at different times during

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the pay period, and who has different work assignments during different time segments within the pay period.

34. (canceled)

35. (currently amended) A computer program product for automatically calculating an employee's compensation, the computer program product comprising a computer usable medium having computer readable code thereon, including program code which:

associates sets of attributes with pay categories, a compensation qualifier being associated with each pay category;

collects information corresponding to identified transactions, the identified transactions including punch information;

forms one or more completed shifts, responsive to the identified transactions and the employee's schedule, each of the completed shifts corresponding to at least one scheduled period of work;

splits the employee's shifts into a plurality of sub-shifts, responsive to work parameters, each of the plurality of sub-shifts corresponding to at least one scheduled sub-period of work,

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wherein the punch information includes information relating to actual times when at least one of the completed shifts begins and finishes, actual times when each sub-shift within the at least one completed shift begins and finishes, and actual times when the employee changes work assignments during the at least one completed shift, each work assignment corresponding to at least one respective sub-shift within the at least one completed shift; and

for each sub-shift,

determines a set of attributes for the sub-shift,

determines a pay category with which the set of attributes is associated,

assigns the pay category to the sub-shift, and

determines compensation for the employee for the sub-shift, responsive to the assigned pay category, the employee's base pay and a compensation qualifier associated with the assigned pay category,

thereby allowing compensation to be determined for the employee who begins and finishes work at different times during the at least one completed shift, and who has different work assignments during different sub-shifts within the at least one completed shift.

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36. (currently amended) A computer data signal embodied in a carrier wave, comprising:

program code which associates sets of attributes with pay categories, a compensation qualifier being associated with each pay category;

program code which collects information corresponding to identified transactions, the identified transactions including punch information;

program code which forms one or more completed shifts, responsive to the identified transactions and the employee's schedule, each of the completed shifts corresponding to at least one scheduled period of work;

program code which splits the employee's shifts into a plurality of sub-shifts, responsive to work parameters, each of the plurality of sub-shifts corresponding to at least one scheduled sub-period of work,

wherein the punch information includes information relating to actual times when at least one of the completed shifts begins and finishes, actual times when each sub-shift within the at least one completed shift begins and finishes, and actual times when the employee changes work assignments during the at least one

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completed shift, each work assignment corresponding to at least one respective sub-shift within the at least one completed shift;

program code which associates a set of attributes with a sub-shift; and

program code which determines compensation for the employee for the sub-shift, responsive to pay categories associated with the set of attributes associated with the sub-shift, the employee's base pay and compensation qualifiers associated with the pay categories,

thereby allowing compensation to be determined for the employee who begins and finishes work at different times during the at least one completed shift, and who has different work assignments during different sub-shifts within the at least one completed shift.

37-60. (canceled)

61. (previously presented) The method of Claim 1, wherein the identified transactions occur during a predetermined time period, and further including the step of

automatically making an employee shift assignment including

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identifying an earliest transaction from among the identified transactions,

qualifying one or more shifts for association with the identified transactions based on the earliest transaction,

selecting a shift from among the one or more qualified shifts, and

associating the identified transactions with the selected shift.

62. (previously presented) The method of Claim 61, further including associating the identified transactions with at least one of the work parameters.

63. (previously presented) The method of Claim 62, wherein the work parameters comprise at least one of workplace rules, scheduled time, holiday calendars, and dates and times of the shift.

64. (withdrawn) A method of making an employee shift assignment, comprising, in a processor:

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forming one or more shifts, responsive to identified transactions and the employee's schedule, wherein the identified transactions occur during a predetermined time period;

identifying an earliest transaction from among the identified transactions;

qualifying one or more shifts for association with the identified transactions based on the earliest transaction;

selecting a shift from among the one or more qualified shifts; and

associating the identified transactions with the selected shift.

65. (withdrawn) The method of Claim 64, further including associating the identified transactions with one or more work parameters, wherein the work parameters comprise at least one of workplace rules, scheduled time, holiday calendars, and dates and times of the shift.

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